## Abstract

The present invention relates to an intraocular correction lens for implantation in the posterior chamber of the eye between the iris and the intact natural lens. The lens has a concave posterior surface which is part of a non-spherical surface that is rotation symmetric around the optical axis of said optical part, wherein the intersection between said non-spherical surface and any plane containing the optical axis of the lens represents a flawless curve free from discontinuities and points of inflection. The invention also relates to methods of selecting correction lenses based on estimations of the individual eye in need of vision correction and thereby arriving with a correction lens with a high safety for wearer with respect to surrounding eye tissues.